

Section B. Boat Characteristics, Stability And Engineering

Introduction

The following are objectives of Section B:

- **Identify and Describe** the indicators of approaching weather.
 - **Recognize** the signs of an unstable vessel.
 - **Recognize and Perform** casualty control for various casualties.
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In this section

This section contains nine tasks:

Reading Assignments	Task Number	Task	See Page
Ref (b) Chapter 12, Section A	COX-02-01-AUX	Describe The Indicators Of Approaching Heavy Weather	2-6
Ref (b) Chapter 9, All	COX-02-02-AUX	Recognize Warning Signs Of An Unstable Vessel	2-7
Ref (b) Chapter 8, Section E	COX-02-03-AUX	State The Procedures To Follow If Engine Will Not Start	2-8
Ref (b) Chapter 8, Section E	COX-02-04-AUX	State The Procedures To Follow For Loss Of Electrical Power	2-9
Ref (b) Chapter 8, Section E	COX-02-05-AUX	State The Procedures To Follow For High Engine Temperature	2-10
Ref (b) Chapter 8, Section E	COX-02-06-AUX	State The Procedures To Follow For Low/No Engine Oil Pressure	2-11
Ref (b) Chapter 8, Section E	COX-02-07-AUX	State The Procedures To Follow For Defective Charging System	2-12
Ref (b) Chapter 8, Section E	COX-02-08-AUX	State The Procedures To Follow For Shaft Vibration	2-13
Ref (b) Chapter 8, Section E	COX-02-09-AUX	State The Procedures To Follow For A Steering Casualty	2-14

Name: _____

Task COX-02-01-AUX

Task **Describe The Indicators Of Approaching Heavy Weather**

References Boat Crew Seamanship Manual, COMDTINST M16114.5 (series), Chapter 12

Conditions Performed at any time ashore, at the dock, or afloat. Trainee must accomplish task without prompting or use of a reference.

Standards In response to the mentor, the trainee must describe the indicators of approaching heavy weather.

Completed **Performance Criteria**

- _____ 1. Listed six of the fifteen indicators of deteriorating weather.
- _____ 2. Listed four of the ten indicators of impending precipitation.
- _____ 3. Listed three of the seven indicators of impending strong winds.

Accomplished **Mentor signature** _____ **Date** _____

Name: _____

Task COX-02-02-AUX

Task	Recognize Warning Signs Of An Unstable Vessel
References	Boat Crew Seamanship Manual, COMDTINST M16114.5 (series), Chapter 9
Conditions	Task should be performed underway observing other vessels in varying wind and sea conditions and when loaded differently (fishing vessels rigged/not rigged).
Standards	The visual observation must note: listing, set high or low in the water, trimmed by bow or stern, and wind/sea conditions. Compare your boat's reaction to sea conditions with the other boat(s).

Completed

Performance Criteria

- _____ 1. Determined if other vessel is listing.
- _____ 2. Determined if other vessel is riding high or low in the water.
- _____ 3. Determined if down by the bow, the stern, or even.
- _____ 4. Determined wind and sea conditions.
- _____ 5. Stated the causes and effects of the following:
 - a. free surface effect
 - b. downflooding
 - c. topside icing
 - d. free communication with the sea

Accomplished **Mentor signature** _____ **Date** _____

Name: _____

Task COX-02-03-AUX

Task	State The Procedures To Follow If Engine Will Not Start
References	Boat Crew Seamanship Manual, COMDTINST M16114.5 (series), Chapter 8
Conditions	Performed at any time ashore, at the dock, or afloat. Trainee must accomplish task without prompting or use of a reference.
Standards	In response to the mentor, the trainee must describe or perform the procedures to follow if engine will not start.

Completed

Performance Criteria

- _____ 1. Anchor made ready.
- _____ 2. Informed controlling authority of situation and location, and stated the importance of keeping the controlling authority updated.
- _____ 3. Described the causes if engine fails to turn over.
- _____ 4. Stated corrective action to take when the engine fails to turn over.
- _____ 5. Described the causes if engine turns over but fails to start.
- _____ 6. State the corrective action to take if the engine turns over but fails to start.

Accomplished **Mentor signature** _____ **Date** _____

Name: _____

Task COX-02-04-AUX

Task **State The Procedures To Follow For Loss Of Electrical Power**

References Boat Crew Seamanship Manual, COMDTINST M16114.5 (series), Chapter 8

Conditions Performed at any time ashore, at the dock, or afloat. Trainee must accomplish task without prompting or use of a reference.

Standards In response to the mentor, the trainee must describe or perform the procedures to follow for loss of electrical power.

Completed **Performance Criteria**

- _____ 1. Anchor made ready.
- _____ 2. Informed controlling authority of situation and location, and stated the importance of keeping the controlling authority updated on situation.
- _____ 3. Described the causes for loss of electrical power.
- _____ 4. State the corrective action to take for a loss of electrical power.

Accomplished **Mentor signature** _____ **Date** _____

Name: _____

Task COX-02-05-AUX

Task **State The Procedures To Follow For High Engine Temperature**

References Boat Crew Seamanship Manual, COMDTINST M16114.5 (series), Chapter 8

Conditions Performed at any time ashore, at the dock, or afloat. Trainee must accomplish task without prompting or use of a reference.

Standards In response to the mentor, the trainee must describe or perform the procedures to follow for high engine temperature.

Completed

Performance Criteria

- _____ 1. Anchor made ready if underway.
- _____ 2. Informed controlling authority of situation and location, and stated the importance of keeping the controlling authority updated.
- _____ 3. Described the causes of high engine temperature.
- _____ 4. Stated the corrective action to take for high engine temperature.
- _____ 5. Stated procedure to follow when securing a hot engine.

Accomplished **Mentor signature** _____ **Date** _____

Name: _____

Task COX-02-06-AUX

Task **State The Procedures To Follow For Low/No Engine Oil Pressure**

References Boat Crew Seamanship Manual, COMDTINST M16114.5 (series), Chapter 8

Conditions Performed at any time ashore, at the dock, or afloat. Trainee must accomplish task without prompting or use of a reference.

Standards In response to the mentor, the trainee must describe or perform the procedures to follow for low/no engine oil pressure.

Completed **Performance Criteria**

- _____ 1. Anchor made ready.
- _____ 2. Informed controlling authority of situation and location, and stated the importance of keeping the controlling authority updated.
- _____ 3. Described the causes for low or no engine oil pressure.
- _____ 4. Stated the corrective action to take for low or no oil pressure.

Accomplished **Mentor signature** _____ **Date** _____

Name: _____

Task COX-02-07-AUX

Task **State The Procedures To Follow For Defective Charging System**

References Boat Crew Seamanship Manual, COMDTINST M16114.5 (series), Chapter 8

Conditions Performed at any time ashore, at the dock, or afloat. Trainee must accomplish task without prompting or use of a reference.

Standards In response to the mentor, the trainee must describe or perform the procedures to follow for defective charging system.

Completed

Performance Criteria

- _____ 1. Anchor made ready if underway.
- _____ 2. Informed controlling authority of situation and location, and stated the importance of keeping the controlling authority updated.
- _____ 3. Described the causes of a defective charging system.
- _____ 4. State the corrective action to take for a defective charging system.

Accomplished **Mentor signature**_____ **Date**_____

Name: _____

Task COX-02-08-AUX

Task	State The Procedures To Follow For Shaft Vibration
References	Boat Crew Seamanship Manual, COMDTINST M16114.5 (series), Chapter 8
Conditions	Performed at any time ashore, at the dock, or afloat. Trainee must accomplish task without prompting or use of a reference.
Standards	In response to the mentor, the trainee must describe or perform the procedures to follow for shaft vibration.

Completed

Performance Criteria

- _____ 1. Anchor made ready.
- _____ 2. Informed controlling authority of situation and location. Stated importance of keeping the controlling authority updated.
- _____ 3. Described the causes of a shaft vibration.
- _____ 4. Stated the corrective action to take for shaft vibration.

Accomplished **Mentor signature** _____ **Date** _____

Name: _____

Task COX-02-09-AUX

Task	State The Procedures To Follow For A Steering Casualty
References	Boat Crew Seamanship Manual, COMDTINST M16114.5 (series), Chapter 8
Conditions	Performed at any time ashore, at the dock, or afloat. Trainee must accomplish task without prompting or use of a reference.
Standards	In response to the mentor, the trainee must describe or perform the procedures to follow for a steering casualty.

Completed

Performance Criteria

- _____ 1. Anchor made ready.
- _____ 2. Informed controlling authority of situation and location, and stated the importance of keeping the controlling authority updated.
- _____ 3. Described the causes of a steering casualty.
- _____ 4. Stated the corrective action to take for a steering casualty.

Accomplished **Mentor signature** _____ **Date** _____